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No. 8808 45.



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PROVISIONAL SPECIFICATION

Improvements relating to Seating Arrangements for Buses and like Vehicles

I, HERBERT MORRIS, of " Broadlea' Scott Park, Burnley, in the County of Laucester, a British Subject, do hereby declare the nature of this invention to be 5 as follows:-

This invention relates to seating arrangements for buses, railway carriages, neorplanes, and like vehicles, hereinafter referred to as bases in which the seats are 10 arranged at opposite sides of the central

gangway. In the usual arrangement the majority of the seats in a bus extend transversely at opposite sides of a central gangway, 15 each seat being long enough to seat two people and the present invention has for its object to introduce an improved sent-

ing arrangement which will give much more comfortable seating accommodation 20 in the same space that is now taken by

the transversely arranged seats.
According to this invention instead of: each seat being made long enough to scat two people; two separate scats are 25 employed, one seat being set at an angle of approximately 30° to 45° to the other seat which is set transversely in relation to the length of the bus, the sent that is set at an angle of 80° to 45° being brought 30 forward a short distance, which for the

purposes of description; may be about 8 inches. Each seat is provided with a back

rest and the rake of the back rest of the off-set forward seat is less than the rake of the rear square set seat.

The chape of the seats is such that support is given only where the average person's body needs support when in a sitting position, thus eliminating all unnecessary obstructions to movement of 40 the arms and legs, and giving all possible clear space for entrance and exit. Each seat may be supported by three legs, the leg that occupies a position between the contacting surfaces of two seats serving 45 as a support for both. The back for each seat may consist of an upwardly extending member fitted at the top with a transverse portion which may be padded and curved to conform more or less to the upper part 50 of the buck or shoulders of a person of everage build, and is so shaped that a clear space exists between any two adjacent seat backs.

The arrangement described affords a 55 space for a single seat at the rearrend of the condition of the condition may be arranged.

the bus and this seat may be arranged longitudinally or facing towards the centra gangway.

ntra gangway.

Dated this 9th day of April, 1945.

APPLEYARD & CROSSLEY,
41, Commercial Street, Halifax.
Agents for the Applicant

COMPLETE SPECIFICATION

Improvements relating to Seating Arrangements for Busesinger varieties, to Seating Arrange and like Vehicles

I, Hersenr Morris, of "Broadlea". In the usual arrangement the majority.

Scott Park; Burnley, in the County of of the double seats in a bus extend trans. 75.

Lancaster, a British Subject, do hereby versely at opposite sides of a central declare the nature of this invention and gangway, each of the double seats being in what manner the same is to be personal in line with each other.

In one arrangement it has been proposed to stagger the seats in each double on 66 formed, to be particularly described and ascertained in and by the following statement:

This invention relates to a seating arrangement for seating a double row of 70 people at opposite sides of a central gangway in buses, railway carriages, aero-planes, and like vehicles, hereinafter referred to as buses.

[Price 1/-]

posed to stagger the seats in each double 80 row so that the outside seat occupies a position in advance of the inside seat.

According to this invention the seating arrangement is so arranged that the inside person in each double row faces the 86 direction of the travel of the vehicle and the outside person in each double row

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occupies a position that is slightly in advance of the inside person and faces towards the gangway at an engle of approximately 15° to 46° to the other 5 person thereby giving more comfortable seating accommodation in the space that is now taken up by the transversely. arranged seats. Each seat may be provided ... with a back rest and the rake of the back 10 rest of the off-set forward seat is less than the rake of the rear square set seat.

The seate for seating two people may be separate or be made as one unit.

In the accompanying diagrams: Fig. 1 is a front elevation, Fig. 2 an end elevation and Fig. 8 a plan of two seats arranged in accordance with this invention.

A indicates the seat that is nearest to the central gangway and B the seat that is adjacent to the side O of the bus.

- In the construction shewn the seats are supported on two tubes D or members which may be attached to the side O of the bus and are supported on and fixed to two tubular or other frame members E F which may be shaped as shewn in Fig. 2 and formed with upwardly extending portions G. H. to which one or more 30 horizontal tubular or cother frame members J can be fixed to support the

back rests K which may be interconnected at L.

The arrangement described affords a

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4 .44 ; 2. space for a single seat at the rear end of a bus and this seat may be arranged longitudinally or facing towards the centre gangway.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim

1. A scating arrangement for seating a double row of people at opposite sides of a central gangway in buses, railway carriages, aeroplanes and like vehicles in which the inside person in each double row faces the direction of the travel of the vehicle and the outside person in each double row occupies a position that is slightly in advance of the inside person and faces towards the gangway at an angle of approximately 15° to 45° to the other person.

2. A seating arrangement according to claim 1 wherein two separate seats are employed in each double row, one seat being set transversely in relation to the length of the bus, and the other seat being set at an angle in relating thereto.

3. A seating arrangement constructed and arranged substantially as shown in

the accompanying drawings:
Dated this 5th day of April, 1946.
APPLEYARD & CROSSLEY, 41, Commercial Street, Halifax. Agents for the Applicant.

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